

Product datasheet for AP06680PU-M

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OriGene Technologies, Inc.

ATF1 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IF, IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunohistochemistry on Paraffin Sections: 1/50-1/200.

Immunofluorescence: 1/50-1/200.

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Immunogen: Synthetic peptide, corresponding to amino acids 170-220 of Human ATF1.

Specificity: This antibody detects endogenous levels of ATF1 protein.

(region surrounding Thr209)

Formulation: PBS, pH 7.2

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% by SDS-PAGE)

Preservative: 0.05% Sodium Azide

Concentration: 1.0 mg/ml

Purification: Immunoaffinity Chromatography

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: ~ 29, 36 kDa

Gene Name: activating transcription factor 1

Database Link: Entrez Gene 466 Human

P18846





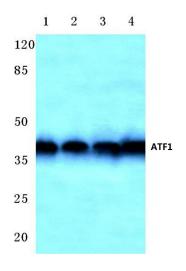
Background:

Eukaryotic gene transcription is regulated by sequence-specific transcription factors that bind modular cis acting promoter and enhancer elements. The ATF/ CREB transcription factor family binds the palindromic cAMP response element (CRE) octanucleotide TGACGTCA. The ATF/CREB family includes CREB-1, CREB-2 (also designated ATF-4), ATF-1, ATF-2 and ATF-3. This family of proteins contain highly divergent N-terminal domains, but share a C-terminal leucine zipper for dimerization and DNA binding. ATF-1 is shown to play a key role in the induction of NOX1, this protein binds the cAMP response element (CRE) and mediates PKA-induced stimulation of CRE-reporter genes. ATF-2 forms homodimers and heterodimers with c-Jun to initiate CREdependent transcription. Phosphorylation of ATF-2 at Thr 69 and Thr 71 by stress-activated kinases is necessary for transcriptional activation. Myc also induces phosphorylation of ATF-2 at Thr 69 and Thr 71 to prolong the half-life of ATF-2. ATF-2 functions as a histone acetyltransferase (HAT) and acetylates Histones H2B and H4 specifically in vitro.

Synonyms:

ATF-1, Activating transcription factor 1, Protein TREB36

Product images:



Western blot (WB) analysis of ATF1 antibody at 1/500 dilution Lane 1:Hela whole cell lysate Lane 2:sp2/0 whole cell lysate Lane 3:H9C2 whole cell lysate Lane 4:Mouse brain tissue lysate